REMARKS

Applicant respectfully requests reconsideration of the application in view of the following remarks.

Rejection of Claims 1, 3, 4, 6, 7 and 10 Under 35 U.S.C. § 102

Claims 1, 3, 4, 6, 7 and 10 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Hideki et al. (JP 08-266616). Applicant respectfully traverses the rejection.

Hideki et al. discloses an intra-aperitoneal indwelling catheter wherein a plurality of grooves are provided in a longitudinal direction on a main body thereof, and a plurality of side holes are provided at a base of each groove. In paragraph 0022 of Hideki et al. (see the attached copy of the English translation which is available from the Japan Patent Office and translated by a machine), there is a description that "...the indwelling part 2 has grooves 23 in the axial direction on the outside surface of the tube and side holes 22 which are formed at the base of the grooves 23." As shown in Figure 2 of Hideki et al., the width of the grooves 23 is wider than the diameter of the side holes 22. That is, neither a groove whose width is narrower than the diameter of the through-holes for draining, nor a plurality of through-holes communicated by grooves, as recited in the present application, are disclosed in Hideki et al.

In a catheter as described in Hideki et al., a plurality of side holes are formed at a bottom surface of each groove (see Fig. 2 of Hideki et al.). The groove of the present invention differs therefrom in the points that a plurality of the through-holes for draining are communicated at side surfaces of the through-holes for draining, and the width of the groove is narrower than diameter of the through-holes for draining. The respective tubes operate differently.

These differences will be described hereinafter with reference to attached References Figs. 1 and 2 for a case in which the widths of the grooves of Hideki et al. and of the present invention are the same as an example.

In Hideki et al., a side hole 22 is formed at a bottom surface of a groove 23. Thus, as shown in Reference Figures 1(A) and (B), a width of the groove 23 is greater than a diameter of the side hole 22. Here, Reference Figure 1(A) shows a partial plan view of a side hole portion of

a tube, (B) a cross-sectional view along a line B-B of (A), and (C) a cross-sectional view along a line C-C of (A).

In Hideki et al., as shown in Reference Figure 1(B), soft tissue within an abdominal cavity enters the groove 23 and an opening portion of the side hole 22 is closed by the soft tissue. In such state, draining is performed through spaces S which remain between corner portions of the groove 23 and the soft tissue. In this state in which the opening portion of the side hole 22 is closed, as the side holes 22 of Hideki et al. do not communicate with each other, draining through the closed side holes is impossible.

Next, the present invention will be described with reference to Reference Figure 2. Here, Reference Figure 2(A) shows a partial plan view of a side hole portion of a tube, (B) a cross-sectional view along a line B-B of (A), (C) a cross-sectional view along a line C-C of (A), (D) a cross-sectional view along a line D-D of (A), and (E) perspective views of a through-hole for draining.

In the present invention, as shown in Reference Figure 2(B), in a state in which soft tissue inside an abdominal cavity enters a groove 22 in the same way as in Hideki et al., draining is performed through spaces S which remain between corner portions of the groove 22 and the soft tissue.

In the present invention too, the soft tissue enters a through-hole for draining 20 and closes an opening portion of the through-hole for draining 20 but width of the groove 22 is narrower than a diameter of the through-hole for draining 20. The soft tissue that has entered the through-hole for draining 20 is prevented from widening by side walls of the groove 22 at a boundary region between the through-hole for draining 20 and the groove 22. Thus, it does not widen over the whole interior of the through-hole for draining 20 and as shown in Reference Figures 2(c) and (E), spaces S1 are formed between it and side surfaces of the through-hole for draining 20. These spaces S1 communicate with spaces S which remain within the groove 22. Thus, liquid passes through the spaces S and the spaces S1 and is drained from the through-hole

for draining 20. Namely, the present invention differs from Hideki et al. in the point that effluent passes through the through-holes for draining.

As described above, the through-holes for draining of the present invention are communicated by the groove at the side surfaces. Thus, even when the soft tissue enters the groove and the opening portion of the through-hole for draining is closed by the soft tissue, draining through the space which remains in the groove and the space which remains in the through-hole for draining whose opening portion is closed is possible. Accordingly, the soft tissue does not enter further into the groove or the through-hole for draining due to draining by suction, and pain is not caused to the patient.

In view of the foregoing, Claim 1 could not be anticipated by Hideki et al. Claims 3, 4, 6, 7 and 10 ultimately dependent on Claim 1, at least for the above reasons, could not be anticipated by Hideki et al. It is respectfully request that the rejection under § 102 be withdrawn.

Rejection of Claims 2, 8, 9, 11, 19 and 20 Under 35 U.S.C. § 102

Claims 2, 8, 9, 11, 19 and 20 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Glassman (U.S. Patent No. 4,579,554). Applicant respectfully traverses the rejection.

Glassman discloses an indwelling urinary catheter in which a plurality of passages 25, which pass through in the longitudinal direction in the side wall of the catheter, are formed, a plurality of grooves 23 are arranged spirally crossing each other on the surface of the body of the catheter, and flow openings 24b, 24, and 24a are formed along the longitudinal direction of the catheter at the sections where the plurality of grooves 23 cross. When sterile irrigating fluid is injected into the passages 25, the sterile irrigating fluid flows through the passages 25 in the direction of the distal end, flows out to the outside of the catheter from the flow openings 24b, 24, 24a, and flows in the grooves 23, whereby the whole surface of the catheter in the urethra can be cleaned.

The passages 25 pass through in the wall of the catheter in the longitudinal direction, and the flow openings 24 are connected with the passages 25. Thus, the Examiner has regarded the combination of the passages 25 and the flow openings 24 as corresponding to the plurality of through-holes for draining formed so as to penetrate the side wall of the single-pipe tube of the present invention.

However, the width of the grooves disclosed in Figure 2 of Glassman appears to be wider than the diameter of the flow openings. That is, neither a groove whose width is narrower than the diameter of the through-holes for draining, nor a plurality of through-holes communicated by grooves, as recited in the present application, are disclosed in Glassman.

Therefore, as discussed above regarding the invention recited in Claim 1, Glassman is also entirely different from the invention as recited in Claim 2. Thus, Claim 2 and the dependent Claims 8, 9, 11, 19 and 20 could not be anticipated by Glassman. It is respectfully requested that the rejection under § 102 be withdrawn.

Rejection of Claims 5, 13, 15 and 17 Under 35 U.S.C. § 103

Claims 5, 13, 15 and 17 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Hideki et al. (JP 08-266616). Applicant respectfully traverses this rejection.

Claims 5, 13, 15 and 17, dependent ultimately on Claim 1, recites the distinct features of Claim 1, and additionally recites the exact width of the groove. As discussed above, the distinct features recited in Claim 1 are not disclosed or suggested in Hideki et al. Thus, Claims 5, 13, 15 and 17 could not be obvious over Hideki et al. Applicant respectfully requests withdrawal of this rejection.

Rejection of Claims 12, 14, 16 and 18 Under 35 U.S.C. § 103

Claims 12, 14, 16 and 18 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Glassman (U.S. Patent No. 4,579,554). Applicant respectfully traverses this rejection.

Claims 12, 14, 16 and 18, dependent ultimately on Claim 2, recites the distinct features of Claim 2, and additionally recites the exact width of the groove. As discussed above, the distinct features recited in Claim 2 are not disclosed or suggested in Glassman. Thus, Claims 12, 14, 16 and 18 could not be obvious over Glassman. Applicant respectfully requests withdrawal of this rejection.

CONCLUSION

In light of the Applicant's amendments to the claims and the foregoing Remarks, it is respectfully submitted that the present application is in condition for allowance. Should the Examiner have any remaining concerns which might prevent the prompt allowance of the application, the Examiner is respectfully invited to contact the undersigned at the telephone number appearing below.

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: January 21, 2004 By: _____

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